

REMARKS

The Office Action mailed November 14, 2002, has been reviewed and the comments of the Patent and Trademark Office have been considered. Claims 7, 8 and 18-20 have been cancelled without prejudice or disclaimer. Claim 6 has been amended. New claims 21-24 have been added. Support for new claims 21-24 can be found at least on page 7 of the present specification. No new matter has been added. Claims 1-5 and 12-17 have been withdrawn from consideration. Claims 6, 9-11 and 21-24 are pending for consideration.

Applicants filed an Information Disclosure Statement ("IDS") with accompanying PTO Form 1449 listing a number of documents on April 20, 2001. Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP §609.

Applicants also filed a Claim for Convention Priority claiming the benefit of prior foreign applications with certified copies of the original foreign applications on April 20, 2001. Applicants respectfully request that the Examiner acknowledge applicants' claim for foreign priority and receipt of the certified copies of the priority documents.

Rejection under 35 U.S.C. § 102

Claims 6-11 and 18-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by JP 6-231771 to Ina et al. (hereafter "Ina"). Applicants respectfully traverse this rejection for at least the following reasons.

As an initial matter, applicants note that the Office Action in rejecting the claims, refers to a Derwent Abstract. Applicants note the Derwent Abstract supplied with the Office Action is an abstract for JP 57-007255 to Yokoyama et al. (hereafter "Yokoyama "), which was cited on the PTO-892 accompanying the Office Action. In any event, applicants discuss both Ina and Yokoyama below.

The rejection with respect to claims 7, 8 and 18-20 is moot in light of the cancellation of those claims.

Claim 6 is directed to a method of producing a methanol reforming catalyst. Claim 6, as amended, recites preparing metal oxide powder including Ce oxide powder or Zr oxide powder. The metal oxide powder is then impregnated with a solution containing Pd and Zn. Thus, the metal oxide powder including the Ce oxide powder or Zr oxide powder serves as a support for the Pd or Zn from the solution. Neither Yokoyama nor Ina suggest impregnating a metal oxide powder including Ce oxide powder or Zr oxide powder with a solution containing Pd and Zn.

Yokoyama discloses producing a catalyst wherein a metal oxide such as alumina is impregnated with a solution containing Pd and Zn (see Derwent abstract). Yokoyama also discloses supporting a base metal, e.g., Cu, Zn, etc. or oxides of these on an alumina support already covered with zirconia. Thus, the support of Yokoyama is alumina. Yokoyama does not disclose the support for the Pd or Zn from the solution to be from a metal oxide powder including Ce oxide powder or Zr oxide powder, but only discloses alumina as a support.

Moreover, the use of a metal oxide powder including a Ce oxide powder or a Zr oxide powder, as recited in claim 6 provides advantages not suggested by Yokoyama. The use of Ce oxide powder for a support can reduce CO concentration. The use of Zr oxide powder as a support can suppress grain-growth of the catalyst and increases the durability of the catalyst. At least in view of these advantages, the method of claim 6 is not obvious over Yokoyama, which discloses an alumina support.

Ina also fails to disclose the invention as recited in claim 6. Ina fails to disclose either preparing metal oxide powder including Ce oxide powder or Zr oxide powder, or impregnating the metal oxide powder with a solution containing Pd and Zn. Thus, claim 6 is likewise patentable over Ina.

For at least the reasons given above, applicants submit that independent claim 6 is patentable over Ina and Yokoyama. The dependent claims are patentable for at least the same reasons as claim 6, as well as for further patentable features recited therein. Accordingly, applicants respectfully request that the rejection of the claims under 35 U.S.C. § 102 be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, applicants respectfully submit that all of the pending claims are now in condition for allowance. An early notice to this effect is earnestly solicited. If there are any questions regarding the application, the Examiner is invited to contact the undersigned at the number below.

Respectfully submitted,

Date

May 1, 2003

By

Thomas G. Bilodeau

FOLEY & LARDNER
Customer Number: 22428



22428

PATENT TRADEMARK OFFICE

Telephone: (202) 672-5300
Facsimile: (202) 672-5399

Richard L. Schwaab
Attorney for Applicant(s)
Registration No. 25,479

Thomas G. Bilodeau
Attorney for Applicant(s)
Registration No. 43,438

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge Deposit Account No. 19-0741 for any such fees; and applicant(s) hereby petition for any needed extension of time.

Versions with Markings to Show Changes Made

In the Claims:

6 (Amended) A method of producing [the] a methanol reforming catalyst [set forth in claim 1], comprising:

preparing metal oxide powder including Ce oxide powder or Zr oxide powder;

impregnating [a] the metal oxide powder with a solution containing Pd and Zn;

and

burning the metal oxide that is impregnated with Pd and Zn.

502